

### AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A device for the production of nanotubes, fullerene and their derivatives comprising: ~~an inductor 8 supplied from a vacuum chamber 1 having an input port 2 and an evacuation port 3, a high frequency generator 9, an inductor 8 inside of vacuum chamber 1 powered by said high frequency generator 9, a graphite element 5 suitable to be invested from the~~ mounted in said vacuum chamber 1, an electromagnetic field generated ~~from around~~ around the inductor 8, ~~where, inside a vacuum-tight chamber 1 with a inlet port 2 and a evacuation port 3, in presence of a, an~~ inert gas flow ~~along the axis of~~ supplied to the graphite element 5 and the inductor 8 between the inlet port 2 and evacuation port 3, causing the a continuous heating ~~for by~~ induced eddy currents and the consequent vaporization of the graphite element 5 ~~is realized and, at the same time, forming a plasma 10 that stays partially inside and beyond the inductor 8 around the head a heating end of the graphite element 5 and afterward the same.~~

Claim 2 (currently amended): The device for the production of nanotubes, fullerene and their derivatives according to the claim 1, ~~characterized in that afterward the first inductor 8 at least further comprising a second inductor 12 is present, this said inductor 12 is supplied from powered by a high frequency generator 13, where, the to form a second~~ electromagnetic field generated ~~from this around~~ around inductor 12 ~~is able to produce another a second plasma 14 with at least the inert gas and graphite vapors that made the previous plasma 10.~~

Claim 3 (previously canceled)

Claim 4 (currently amended): The device for the production of nanotubes, fullerene and their derivatives according to the claim 1, ~~characterized in that~~ wherein the graphite element 5 is formed from ~~more at least two~~ at least two rods 5,7, ~~alternatively said rods being shaped in a such way to stack up and to support themselves.~~

Claim 5 (currently amended): The device for the production of nanotubes, fullerene and their derivatives according to the claim 1, ~~characterized in that further comprising an injection device 15 that injects for injecting~~ for injecting powders and/or liquid or gas inside the inductor 8 ~~is used.~~

Claim 6 (currently amended): A method for the production of nanotubes, fullerene and their derivatives ~~characterized in that,~~ in an environment where a inert gas flow is

present at a atmospheric pressure or at a lower pressure with respect to atmospheric pressure, a high frequency electromagnetic field is generated, ~~then, comprising the steps of subjecting one end of~~ a graphite element 5 ~~is subjected at one end from this to said~~ electromagnetic field and ~~it is heated until~~ heating said graphite element to vaporization and simultaneously causing the formation and the persistence of a plasma 10 ~~happen~~ around ~~and afterward~~ the vaporization zone of the same graphite element 5.

Claim 7 (currently amended): The method for the production of nanotubes, fullerene and their derivatives according to claim 6, ~~characterized in that afterward the plasma 10, at least another~~ further comprising the steps of generating a second plasma 14 ~~is present, this plasma 14 is generated from at least~~ from a second high frequency electromagnetic field.

Claim 8 (previously canceled)

Claim 9 (previously canceled)

Claim 10 (previously canceled)

Claim 11 (previously canceled)

Claim 12 (previously canceled)

Claim 13 (currently amended): The device for the production of nanotubes, fullerene and their derivatives according to claim 1, ~~characterized in that~~ wherein for the collection of nanotubes, fullerene and their derivatives a device is installed at the exit of evacuation port 3.

Claim 14 (currently amended): The device for the production of nanotubes, fullerene and their derivatives according to claim 2, ~~characterized in that~~ wherein for the collection of nanotubes, fullerene and their derivatives a device is installed at the exit of evacuation port 3.

Claim 15 (currently amended): The method for the production of nanotubes, fullerene and their derivatives according to claim 6, ~~characterized in that, to be~~ further comprising a continuous method ~~with the~~ of picking up of nanotubes, fullerene and their derivatives by means of a device placed at the exit of evacuation port 3.

Claim 16 (currently amended): The method for the production of nanotubes, fullerene and their derivatives according to claim 7, ~~characterized in that to be~~ further

comprising a continuous method ~~with the~~ of picking up of nanotubes, fullerene and their derivatives by means of a device placed at the exit of evacuation port 3.

Claim 17 (currently amended): The device for the production of nanotubes, fullerene and their derivatives according to claim 1, ~~characterized in that~~ wherein the graphite element 5 is made up of graphite with a purity not lower than 90%.

Claim 18 (currently amended): The method for the production of nanotubes, fullerene and their derivatives according to claim 6, ~~characterized in that~~ wherein the graphite element 5 is made up of graphite with a purity not lower than 90%.

Claim 19 (currently amended): The device for the production of nanotubes, fullerene and their derivatives according to claim 1, ~~characterized in that~~ wherein the graphite element 5 is doped or added with other substances solid and/or liquid.

Claim 20 (currently amended): The method for the production of nanotubes, fullerene and their derivatives according to claim 6, ~~characterized in that~~ wherein the graphite element 5 is doped or added with other substances solid and/or liquid.

Claim 21 (currently amended): The device for the production of nanotubes, fullerene and their derivatives according to the claim 19, ~~characterized in that~~ wherein the graphite element 5 includes catalyst metal.

Claim 22 (currently amended): The method for the production of nanotubes, fullerene and their derivatives according to the claim 20, ~~characterized in that~~ wherein the graphite element 5 includes catalyst metal.

Claim 23 (currently amended): The device for the production of nanotubes, fullerene and their derivatives according to the claim 21, ~~characterized in that~~ wherein the graphite element 5 includes catalyst metal ~~is composed of one or two or more of metal~~ selected from a the group ~~including~~ consisting of Co, Ni, Sc, V, Cr, Fe, Cu, Y, Zr, Nb, Mo, Pd, Ta, W, Au, Th, U, La, Ce, Pr, Nd, Gd, Tb, Dy, Ho, Er, Tm, Lu.

Claim 24 (currently amended): The method for the production of nanotubes, fullerene and their derivatives according to the claim 22, ~~characterized in that~~ wherein the graphite element 5 includes catalyst metal ~~is composed of one or two or more of metal~~ selected from a the group ~~including~~ consisting of Co, Ni, Sc, V, Cr, Fe, Cu, Y, Zr, Nb, Mo, Pd, Ta, W, Au, Th, U, La, Ce, Pr, Nd, Gd, Tb, Dy, Ho, Er, Tm, Lu.

Claim 25 (new): The device for the production of nanotubes, fullerene and their derivatives according to the claim 1, wherein the output of said high frequency generator 9 has a frequency value of approximately 800 kHz and the electromagnetic field generated from inductor 8 transmits to graphite rod 5 a power of approximately 2.5 kW for each square centimeter of graphite rod surface faced to the inductor.